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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,574	06/23/2003	Kinya Aota	503.35255VX4	9655

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ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VA 22209-3873

EXAMINER

JOHNSON, JONATHAN J

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 11/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/600,574

Applicant(s)

AOTA ET AL.

Examiner

Jonathan Johnson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 6-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 08/820231.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 and 6-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case, claims 1 and 2 recite "substantially uniform width," "substantially uniform height," and "substantially perpendicular" however applicant has no support for such a broad range in his specification. Instead, applicant only has support for "uniform width," "uniform height," and "perpendicular," respectively.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-3 and 6-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki et al. (JP 2-246863) in view of Midling et al. (WO 95/26254). Mochizuki et al. teach an end portion of said hollow member, which is capable of being used in friction stir welding, the hollow frame member has a raised portion (figure 2, item 27e) which projects to an outer side in a thickness direction (vis a vis figure 2, item 27c and the opposite side) of said hollow frame member from one side of the face of said hollow frame member and is provided integrally on said end portion of the hollow frame member (figure 2, item 27a and 27b); said raised portion of said hollow frame member is capable of having a rotary tool and where during the welding the material of the raised portion is capable of filling the gaps; having a first and second plate, which is substantially parallel to the first plate (figure 2, items 1 and 2); a third plate connecting said first plate and second plate and a raised portion integrally provided on an end portion of the first plate (figure 2, item 27c), said raised portion projects to an outer side in a thickness direction of said first plate from one side of said first plate (vis a vis figure 2, item 27c and the opposite side); said raised portion of said first plate is a portion capable of having a rotary tool inserted therein so as to carry out the friction stir welding and during the weld the material of the raised portion is capable of filling the gaps; having a first and second plate, which is substantially parallel to the first plate (figure 2, items 1 and 2); where an end portion of a second plate at a side of an end portion of said first plate of said hollow frame member having said raised portion, the hollow frame member has a further raised portion (figure 2, item 27e); where the further raised portion projects to an outer side in a thickness direction of the second plate from one side face of said second plate (figure 2, item 27f, where the side portion is the side of the plate); said further raised portion of said second plate is a portion capable of having said rotary tool inserted therein,

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during the friction stir welding, material of said further raised portion of the second plate fills any gaps (figure 2, items 1 and 2); where the plates have exposed outer faces and where the raised portion project beyond the exposed outer faces of the first and second plates in the thickness direction (figure 2, items 27a and b); where the thickness direction is perpendicular to the exposed outer faces (figure 2, items 27a and b); where the thickness direction is a direction perpendicular to the first plate (figure 2, items 27a and b); where the first plate of hollow member has an exposed outer face and wherein the raised portion projects beyond the exposed outer face in the thickness direction (figure 2, items 27a and b); where the members are of the same material (figure 2, item 27); and a vertical plate or third plate located below the raised portion (figure 2, item 27c). The examiner notes that the raised portion will necessarily fill gaps between the members during the friction stir welding process. Midling et al. teach at an end portion of first and second plate adapted to be used in friction stir welding, said member has a raised portion which projects to a thickness direction, where the thickness direction is along the thickness of the length, of said member from one side face of said member (figure 5c), and said raised portion is a portion adapted to have a rotary tool inserted therein so as to carry out a friction stir welding (figure 5c, friction stir welding tool). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the structure of Mochizuki et al. to utilize friction stir welding in order to ensure uniform homogenized weld seams (see Midling et al. page 2).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3, and 6-22 have been considered but are moot in view of the new ground(s) of rejection.

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Applicant argues there is no criticality set forth in Applicant's disclosure for "exactly" uniform or "exactly" perpendicular. The examiner agrees. Applicant goes on to argue that because of this, applicant should be allowed to claim the broad range of substantially uniform and substantially perpendicular. The examiner disagrees. Merely because there is no criticality does not mean that applicant can claim such a broad range. Instead, applicant's specification must reasonably convey the had possession of the claimed invention.

In the instant case, it is the examiner's position that applicant's single embodiment showing uniform and perpendicular does not reasonably convey that applicant had possession of the broadly claimed invention. As stated in the previous office action, applicant only has support for "uniform" and "perpendicular." Applicant does not have support for the broad range of substantially uniform and substantially perpendicular.

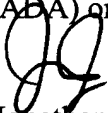
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jonathan Johnson  
Primary Examiner  
Art Unit 1725

jj